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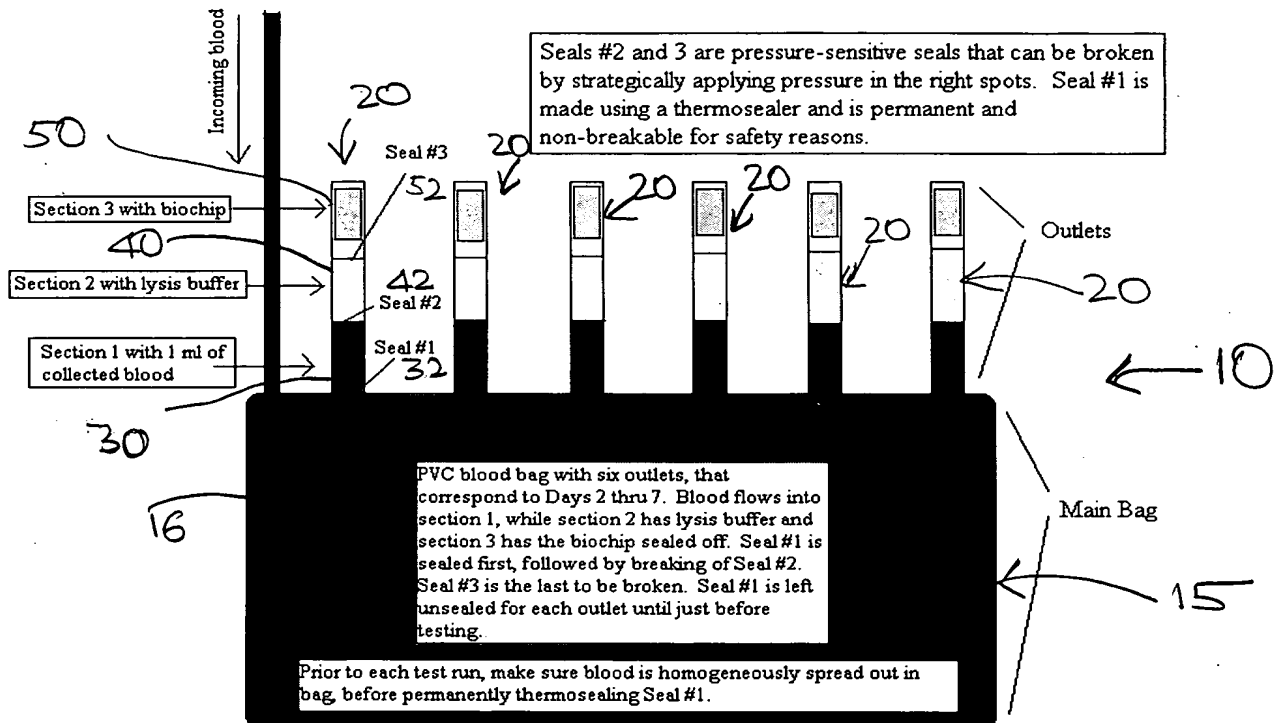


FIGURE 1

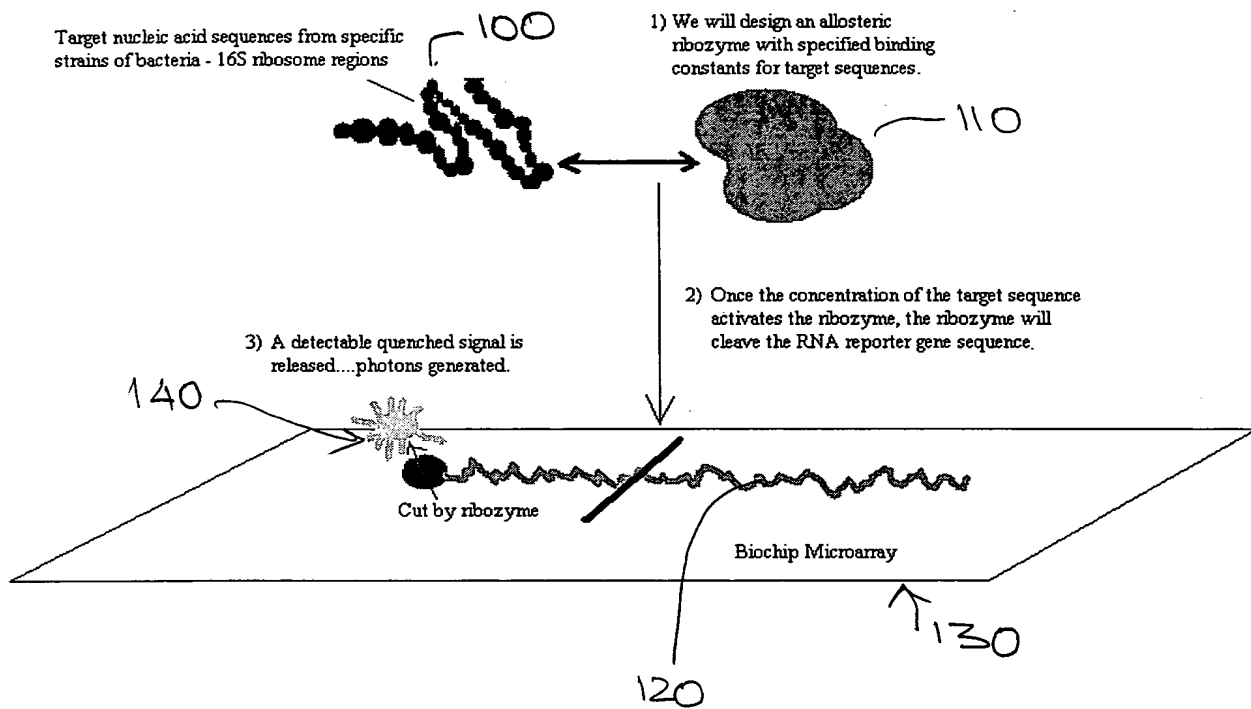
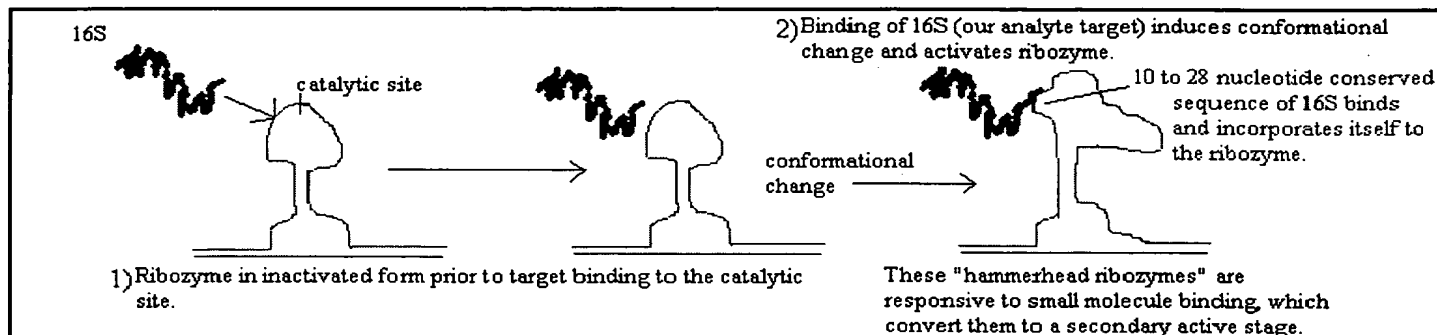


FIGURE 2

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Version1: Halfzyme™(inactivated ribozyme) and reporting gene immobilized on solid support.



Also attached to the ribozyme is a cutting sequence attached to a "molecular signal probe". This signal probe has a 5' fluorescent dye (such as FAM) and a 3' quencher molecule (such as DABCYL = 4-dimethylaminophenylazobenzoyl).

The probe is designed to form a structure that brings into close proximity the 5' and 3' ends of the probe, which quenches the fluorescent signal. Once the ribozyme cuts the cutting sequence of the reporter gene, the FAM dye and quencher molecule DABCYL will separate and give off a strong fluorescent signal, as an electron jumps due to the split.

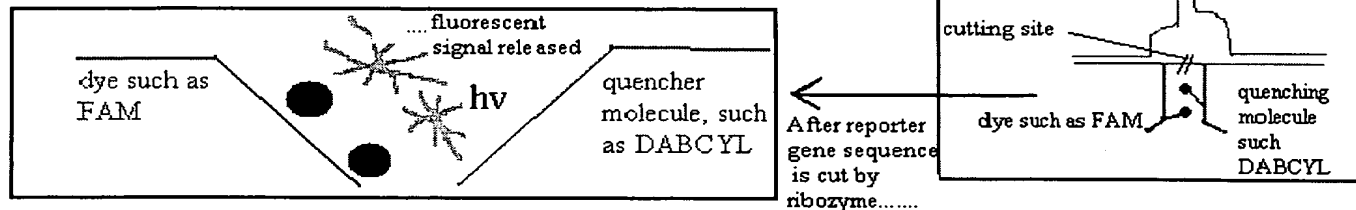


FIGURE 3

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Version 2: Liquid Phase/The ribozyme unit will be introduced to the biochip separately via a liquid phase, and the reporter gene with signal probe will be already fixed to the biochip.

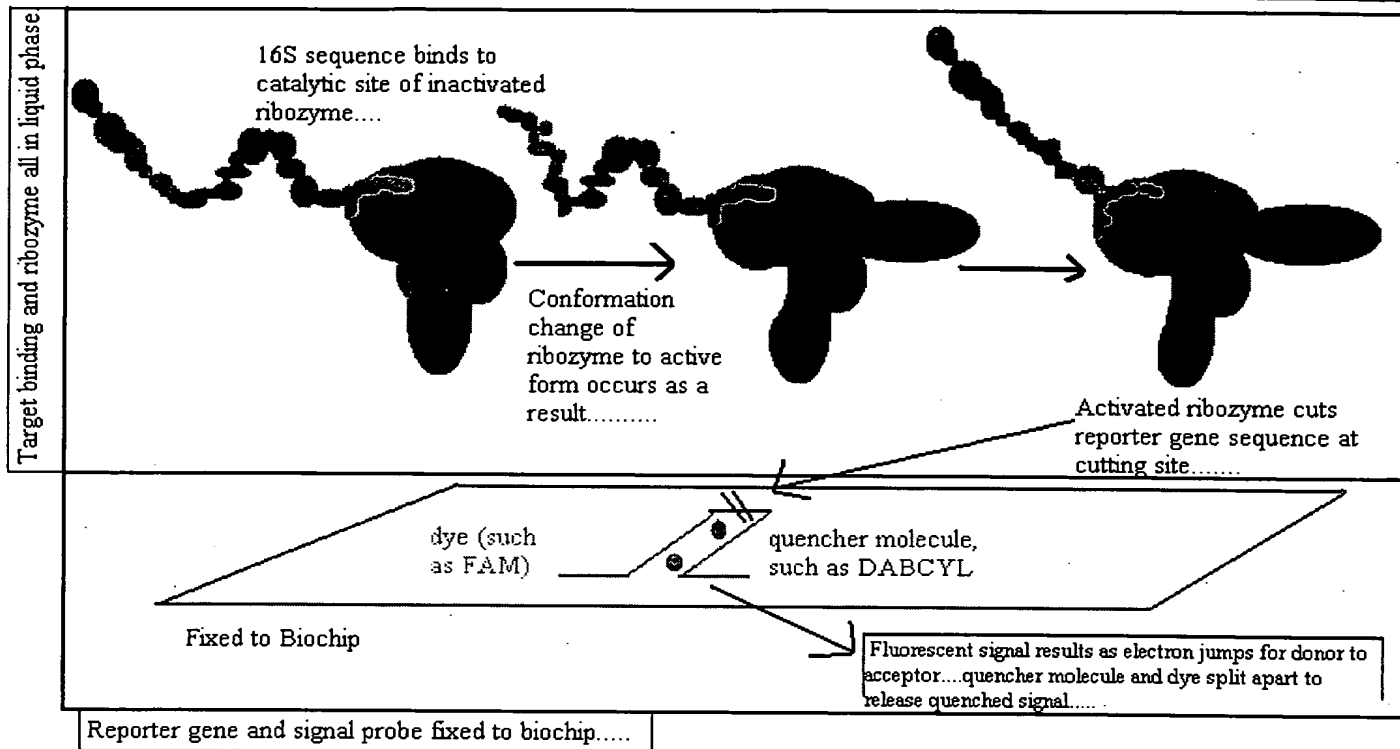


FIGURE 4